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EXAMINER

GOON, SCARLETT Y

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

This Office Action is in response to Applicant's response after FINAL filed on 30 June 2009. No proposed amendment to the claims has been filed after FINAL.

As properly indicated by Applicants, the previous Office Action should have indicated the rejection of claims 1, 4-7, 10, 11, 14-16, 19 and 20 rather than claims 1-20, as claims 2, 3, 8, 9, 12, 13, 17 and 18 were cancelled.

Applicants' arguments, submitted 30 June 2009, with respect to the rejection of claims 1, 4-7, 10, 11, 14-16, 19 and 20 under 35 U.S.C. 103(a) as being unpatentable over Kakuchi *et al.*, in view of Dederen *et al.*, have been fully considered but are not persuasive to overcome the prior art rejection of record.

Applicants' arguments, submitted 30 June 2009, with respect to the rejection of claims 1, 4-7, 10, 11, 14-16, 19 and 20 under 35 U.S.C. 103(a) as being unpatentable over Kakuchi *et al.*, in view of Wang *et al.*, have been fully considered but are not persuasive to overcome the prior art rejection of record.

Applicants argue that there is no teaching, suggestion, motivation, or other reason to combine Kakuchi in view of Dederen, or Kakuchi in view of Wang, because 1) it was common to use a linear polysaccharide in an external preparation; 2) multi-branched polysaccharides *per se* has not been generally used as a polymer; and 3) the useful properties of a multi-branched polysaccharide for use in an external preparation have not been known to the public. Furthermore, Applicants argue that it would be

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difficult for one to substitute the multi-branched polysaccharides of Kakuchi in place of the linear polysaccharides of Dederen because linear polysaccharides have a one digit larger viscosity that is completely different from multi-branched polysaccharides in a solution state, as evidenced by Satoh. Therefore, a person of ordinary skill in the art would not have expected employing multi-branched polysaccharides for use in an external preparation for skin to enable a smoother feeling.

These arguments are not persuasive because the Applicants are requested to note that although it is possible that a person of ordinary skill in the art would not have expected employing multi-branched polysaccharides for use in an external preparation for skin to enable a smoother feeling, or that a multi-branched polysaccharide has not been previously used in an external preparation, the prior art may provide a different motivation for combining. Applicants are requested to note that the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Additionally, as taught by Kakuchi *et al.*, the water-soluble multi-branching polysaccharides can be synthesized in high reproducibility in large quantities, and are useful as a thickener in a biocompatible gel or a medically-based material. Thus, as both Dederen *et al.* and Wang *et al.* teach the use of polysaccharides in cosmetics, which are known to be good humectants, film formers and function as skin moisturizers, one of ordinary skill in the art would have been motivated to substitute the

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heterogeneous polysaccharides in the teachings of Dederen *et al.* and Wang *et al.* with the branching polysaccharides disclosed by Kakuchi *et al.*, in order to receive the expected benefit that the water-soluble multi-branching polysaccharides can be synthesized in high reproducibility in large quantities. One would view this as a motivation as it is well-known that homogenous structures would give rise to more consistent end-products rather than heterogeneous structures where the properties could vary depending on isolation source and method.

Applicants' argument that the difference in viscosity between linear polysaccharides and multi-branched polysaccharides would not motivate one to substitute the polysaccharides of Dederen or Wang with a multi-branched polysaccharide is not persuasive because cosmetics are known to come in different forms, with different viscosities and consistencies ranging from liquids to thick cream. Furthermore, other than polysaccharides, other thickening agents, such as polyethylene glycol and other synthetic polymer materials, are used to alter the viscosity of cosmetics. Thus, it is unlikely that the viscosity of the polysaccharide would be sufficient to deter one from making the substitution. Furthermore, it is considered that the advantage that the multi-branched polysaccharides can be synthesized in high reproducibility in large quantities is sufficient motivation for one to make the substitution.

All rejections of record in the Final Office Action dated 30 June 2009 are maintained since Applicants arguments are not persuasive to overcome the prior art rejection of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SCARLETT GOON whose telephone number is 571-270-5241. The examiner can normally be reached on Mon - Thu 7:00 am - 4 pm and every other Fri 7:00 am - 12 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SCARLETT GOON
Examiner
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